

Claims

1. An animal tag comprising,
a penetrating component having two ear penetrating members joined by a strip of intermediate material,
a complementary component having a locking portion for each penetrating member, and
ramp means for each locking portion,
wherein the arrangement is such that the ear penetrating members are designed to be passed through the ear of an animal and to lock onto the locking portions to sandwich the ear in a gap between the penetrating component and complementary component and the ramp means are arranged to co-operate with the skin penetrating members to vary the size of the gap whereby to provide a range of gap sizes to accommodate varying ear thicknesses and/or growth of the animal.
2. An animal tag according to claim 1 wherein the ramp means comprise a pair of ramps connected on opposite sides by a joining portion, and the joining portion extends into the gap so as to provide circulation regions around the two ear penetrating members where the gap is increased in width compared with a region of the gap between the joining portion and the ear.
3. An animal tag according to claim 1 or claim 2 wherein each ear penetrating member comprises a skin penetrating head joined to the strip of intermediate material by a tubular portion, the join between each skin penetrating head and tubular portion being formed as shoulder adapted to cooperate with one of the locking portions to lock the penetrating component and complementary component together.
4. An animal tag according to claim 3 wherein each skin penetrating head comprises a central supporting portion of moulded plastics material provided with at least two thin flanges extending from the central supporting portion, the at least two thin flanges having sharp edges and meeting at a sharp point forward of the supporting portion.

5. An animal tag according to claim 3 or claim 4 wherein each of the locking portions comprise a cap which substantially covers and surrounds each skin penetrating head.
6. An animal tag according to any one of the preceding claims wherein the strip of intermediate material comprises plastic material which is sufficiently flexible to be bent from a substantially flat configuration when regions of the ear penetrating members joined to the strip of intermediate material are at their maximum separation, to a bent configuration when the regions of the ear penetrating members are squeezed towards each other.
7. An animal tag according to any one of the preceding claims having attached thereto any one or more of a flag, a transponder, any form of data concerning the animal to which the animal tag is attached, any form of diagnostic or electronic device, any form of treatment device or chemical, any form of signalling device, and any form of locating device.
8. An animal tag according to claim 7 having attached thereto a flag and a transponder.
9. An animal tag according to claim 8 wherein the transponder is housed in a housing attached to the flag.
10. An animal tag according to claim 9 wherein the housing comprises a first housing component having a recessed portion and second housing component joined to the first housing component by a hinge, whereby the first and second housing components may be folded into overlapping relationship to cover the recess and so form the housing.
11. An animal tag according to claim 8 wherein the transponder comprises a wafer secured beneath the strip of intermediate material and between the two ear penetrating members.

12. An animal tag comprising,
a penetrating component having two ear penetrating members joined by a strip of intermediate material,
a complementary component having a locking portion for each penetrating member, and
a joining portion extending between and joined to the locking portions,
wherein the arrangement is such that the ear penetrating members are designed to be passed through the ear of an animal and to lock onto the locking portions to sandwich the ear in a gap between the penetrating component and complementary component and the joining portion extends into the gap so as to provide circulation regions around the two ear penetrating members where the gap is increased in width compared with a region of the gap between the joining portion and the ear.
13. An animal tag according to claim 12 wherein each ear penetrating member comprises a skin penetrating head joined to the strip of intermediate material by a tubular portion, the join between each skin penetrating head and tubular portion being formed as shoulder adapted to cooperate with one of the locking portions to lock the penetrating component and complementary component together.
14. An animal tag according to claim 13 wherein each skin penetrating head comprises a central supporting portion of moulded plastics material provided with at least two thin flanges extending from the central supporting portion, the at least two thin flanges having sharp edges and meeting at a sharp point forward of the supporting portion.
15. An animal tag according to claim 13 or claim 14 wherein each of the locking portions comprise a cap which substantially covers and surrounds each skin penetrating head.
16. An animal tag according to any one of claims 12 to 15 wherein the strip of intermediate material comprises plastic material which is sufficiently flexible to be bent from a substantially flat configuration when regions of the ear penetrating members joined to the strip of

intermediate material are at their maximum separation to a looped configuration when the regions of the ear penetrating members are squeezed towards each other.

17. An animal tag according to any one of claims 12 to 16 having attached thereto any one or more of a flag, a transponder, any form of data concerning the animal to which the animal tag is attached, any form of diagnostic or electronic device, any form of treatment device or chemical, any form of signalling device, and any form of locating device.

18. An animal tag according to claim 17 having attached thereto a flag and a transponder.

19. An animal tag according to claim 18 wherein the transponder is housed in a housing attached to the flag

20. An animal tag according to claim 19 wherein the housing comprises a first housing component having a recessed portion and second housing component joined to the first housing component by a hinge, whereby the first and second housing components may be folded into overlapping relationship to cover the recess and so form the housing.

21. An animal tag according to claim 8 wherein the transponder comprises a wafer secured beneath the strip of intermediate material and between the two ear penetrating members.

22. An animal tag according to any one of the preceding claims wherein each locking portion comprise a slot and each penetrating member comprises a skin penetrating head for passing through the slot.

23. A method of tagging an ear of an animal comprising,
applying a penetrating component of an animal tag having two ear penetrating members joined by a strip of intermediate material to the ear of the animal by causing the ear penetrating members to penetrate through the ear in a region of the ear defined between adjacent vascular ridges running lengthwise along the underneath surface of the ear, and
locking a complementary component of the animal tag onto the ear penetrating members.
24. A method of tagging an ear of a sheep or bovine animal according to claim 23 comprising,
applying the penetrating component so that it lies on an upper generally horizontal surface of the ear.
25. A method according to claim 24 including the step of securing a transponder to the strip of intermediate material.
26. A method of tagging an ear of a bovine animal according to claim 23 comprising applying the penetrating component so that it abuts a generally vertically directed surface of the ear.
27. A method according to claim 26 including the step of securing a transponder on the complementary component.
28. An animal tag substantially as hereinbefore described with reference to the accompanying drawings.